



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,514	05/22/2006	Sheila Kennedy	HMI P1192US2	9253
37190 7590 09/29/2010 VARNUM, RIDDERING, SCHMIDT & HOWLETT LLP 333 BRIDGE STREET, NW P.O. BOX 352 GRAND RAPIDS, MI 49501-0352			EXAMINER LAUX, JESSICA L	
			ART UNIT 3635	PAPER NUMBER
			NOTIFICATION DATE 09/29/2010	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

cnlapekes@varnumlaw.com
patents@varnumlaw.com

Office Action Summary	Application No. 10/526,514	Applicant(s) KENNEDY ET AL.	
	Examiner JESSICA LAUX	Art Unit 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/12/2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 and 46 is/are pending in the application.
- 4a) Of the above claim(s) 14-45 and 47-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/23/2007</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Species I, Species X and Species XX in the reply filed on 7/12/2010 is acknowledged.

As applicant has indicated that claims 1-9, 10-13 and 46 are readable on the elected species claims 14-45, 47-58 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/12/2010.

Priority

Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged. Applicant has not complied with one or more conditions for receiving the benefit of an earlier filing date under 35 U.S.C. 119 and/or 120 as follows:

The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. 60/408183, fails to provide adequate support or enablement in the manner provided by the first paragraph

Art Unit: 3635

of 35 U.S.C. 112 for one or more claims of this application. The provisional application does not adequately support that the system is configured to permit commercial utilities to extend downwardly below a plane formed by the shielding elements or that they have sufficient porosity to permit commercial fire safety utilities positioned above a plane formed by the shielding elements. Rather application 60/408183 at page 10, lines 22-23 provides that the materials may be constructed and configured to accommodate additional utilities (e.g. sprinklers and the like) below a ceiling plane and page 11 lines 5-6 provides that the materials can be constructed to accommodate utilities below the plane of the ceiling structure. This is not sufficient to support the claims including utilities that extend downwardly or having porosity to permit fire safety utilities to be positioned above a plane. Accordingly, claims 4-5 are not entitled to the benefit of the prior application.

Requirement for Information

Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

The information is required to identify products and services embodying the disclosed subject matter of 3D-Pongi fabric and heliofon fabric (which applicant discloses is commercially available) and identify the properties of similar products and services found in the prior art.

A prior art search of both above noted terms did not produce any results besides applicant's own invention. An additional internet search using Google as a search

Art Unit: 3635

engine also did not yield any results. However, the examiner was able to determine that pongee and helios are both woven fabrics. It is unclear whether these are the same as or different than applicant's 3D Pongi and heliofon fabrics. Therefore, the lack of relevant prior art found in the examiner's search justifies asking the applicant if he or she has information that would be relevant to the patentability determination regarding 3D Pongi fabric and heliofon fabric. Please provide clarification regarding these materials.

In responding to those requirements that require copies of documents, where the document is a bound text or a single article over 50 pages, the requirement may be met by providing copies of those pages that provide the particular subject matter indicated in the requirement, or where such subject matter is not indicated, the subject matter found in applicant's disclosure.

As this Office action includes a requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the included requirement for information. The time period for reply to the requirement coincides with the time period for reply to this Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. As noted above, the examiner has been unable to determine

Art Unit: 3635

what a "3D Pongi fabric" is, rendering the claim indefinite. For the purposes of examination, in view of the above noted search revealing a pongee fabric, the claim will be examined as best understood where the examiner believes a 3D Pongi fabric to be the same as a pongee fabric which is a woven cloth.

Specification

The disclosure is objected to because of the following informalities:

- page 3, line 11 "system" should be plural;
- page 4, line 15 "schema" should be "scheme";
- page 9, line 1 "of" should be "or";
- page 10 line 8 "in" should be "is".

Appropriate correction is required.

The specification and drawings have been checked to determine the presence of all possible errors however due to the lengthy specification and drawings applicant's cooperation is requested in correcting any missed errors of which applicant may become aware of in the specification and drawings.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

Art Unit: 3635

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1,4-12,46 are rejected under 35 U.S.C. 102(e) as being anticipated by Kennedy (7303305).

The applied reference has a common inventor with the instant application.

Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claim 1. A ceiling system for use with a supporting infrastructure, said supporting infrastructure providing for distribution of electrical power and comprising a plurality of frames, said ceiling system comprising:

a plurality of shielding elements (14) supported within said plurality of frames (17);

a series of lighting elements (18) electrically coupled and energized through said electrical power distribution, said lighting elements adjacent to or otherwise incorporated within said shielding elements (as seen in the figures and noted throughout the disclosure); and

said shielding elements being movably mounted to said ceiling structure (as noted in Col. 3, line 66-Col. 4, line 3 - where 14 is considered the shielding element),

and constructed of materials having varying degrees of translucence, so as to adjust intensity and diffusion of lighting projected from said lighting elements (Col. 3, lines 47-53).

Claim 4. A ceiling system in accordance with claim 1, characterized in that said materials are constructed and configured so as to permit commercial interior utilities to extend downwardly below a plane substantially formed by said plurality of shielding elements (Col. 5, lines 30-33 (which would place the utility below element 14)).

Claim 5. A ceiling system in accordance with claim 1, characterized in that said materials are constructed and configured so as to have sufficient porosity to permit commercial interior fire safety utilities to be positioned above a plane substantially formed by said plurality of shielding elements (col. 5, lines 22-29 – where it is disclosed and shown that the sprinkler is above element 14 and where it is disclosed that at Col. 3, lines 47-53 that the shielding element may be made of porous materials).

Claim 6. Kennedy disclose the ceiling system in accordance with claim 1, where the series of lighting elements (18) and the plurality of shielding elements (14) are removable from said supporting infrastructure (Col. 3, line 66 –Col. 4, line 3 discloses that the shielding element is removable; Col 5, lines 60-62 discloses that lighting element 18 is easily replaced; based on an understanding of the structure and how the elements are assembled the device of Kennedy is certainly capable of being removed manually).

Claim 7. A ceiling system in accordance with claim 1, characterized in that said series of lighting elements comprises a series of LED lighting module strips (Col. 4, lines 27-55; and as seen in the figures).

Claim 8. A ceiling system in accordance with claim 1, characterized in that said supporting infrastructure comprises parallel and spaced apart rails (17; as seen in the figures and at Col. 4, lines 8-12), and

said shielding elements are supported on sides of adjacent rails on pairs of opposing L-shaped brackets (as seen in the figures and noted at Col. 4, lines 4-12 where the shielding elements are attached to panels 12 which are supported by the rails 17 via slot 15).

Claim 9. A ceiling system in accordance with claim 8, characterized in that said shielding elements are releasably secured to said L-shaped brackets through securing means (Col. 3, line 58 – Col. 4, line 3).

Claim 10. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise acoustic ceiling shielding elements having materials for providing sound absorption (Col. 3, lines 47-50 – disclose the material type, where cloth or other materials would absorb sound waves; Col. 2, lines 6-13).

Claim 11. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise acoustic ceiling shielding elements having materials for providing sound reflection (where Col. 3 lines 50-52 disclose non-woven materials which would provide for some sound reflection as not all sound waves would be absorbed).

Claim 12. A ceiling system in accordance with claim 1, characterized in that said shielding elements comprise air-filled cellular structures (where the space between element 14 and panel 12 is filled with air).

Claim 46. A ceiling system in accordance with claim 1, characterized in that said shielding elements may be coupled to said supporting infrastructure through flexible or hinged means, so that said shielding elements may be suspended in varying angular orientations (where Col. 6, lines 9-11 discloses that the modules may be hung at different angles).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy (7303305) in view of Bailey (6540373).

Claim 2. Kennedy discloses the ceiling system in accordance with claim 1, characterized in that said ceiling system and supporting infrastructure are suspended from a building roof or similar overhead structure (as noted throughout the disclosure Kennedy discloses a ceiling surface and can be incorporated with a convention hung ceiling system) but does not expressly disclose that a conventional hung ceiling system includes the use of cable elements to suspend the system.

Art Unit: 3635

Bailey discloses a lighting system for use in hung ceiling and further discloses that the hung ceiling includes a T rail grid that is suspended by a plurality of cables (118 - Col. 1, lines 18-25; Col. 2, lines 49-58).

In view of the prior art at the time the invention was made it would have been obvious to one of ordinary skill in the art to modify the grid structure of Kennedy to be hung by cables as disclosed by Bailey to provide a secure and conventional manner to suspend the system from a permanent ceiling.

Claim 3. Kennedy in view of Bailey disclose a ceiling system in accordance with claim 2, where Kennedy discloses that elements may be adjusted so as to adjust the height of said ceiling system (Col. 6, lines 8-11), relative to the height of said building roof or said similar overhead structure, but does not disclose that the cable elements are the elements to be adjusted; Bailey is silent regarding adjusting the height of the elements.

However, adjusting the cable elements would be an obvious way to adjust the height of the ceiling system as the cable elements are the connecting elements between the permanent structure and the ceiling system and therefore have the most effect on the height of the elements. Therefore, one of ordinary skill in the art would have been motivated, or would have had the general skill and common sense to try to adjust the cable elements to adjust the height of the ceiling with the predictable result of a ceiling system with variable heights.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy (7303305).

Art Unit: 3635

Claim 13 (as best understood). Kennedy discloses the ceiling system in accordance with claim 1, where the shielding elements are made of a woven fabric (Col. 3, lines 47-50) but does not disclose that the fabric is 3D-Pongi fabric.

At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the fabric of Kennedy to be a 3D Pongi fabric because applicant has not disclosed that such a fabric provides an advantage, is used for a particular purpose, or solves a stated problem. Additionally it is noted that the application discloses throughout the specification that various materials and fabrics would be suitable. One of ordinary skill in the art, furthermore, would have expected the materials and woven cloths of Kennedy, and applicant's invention to perform equally well with either the woven cloth taught by Kennedy or the claimed woven 3D Pongi fabric because both would perform the same function of diffusing the light equally well.

Therefore, it would have been prima facie obvious to modify Kennedy to obtain the invention as specified in the claims because such a modification would have been considered a mere design consideration which fails to patentably distinguish over the prior art of.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JESSICA LAUX whose telephone number is (571)272-8228. The examiner can normally be reached on Monday thru Thursday, 9:00am to 5:00pm (est).

Art Unit: 3635

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jessica Laux/
Examiner, Art Unit 3635